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by

B.L. Blowers

Margie Griffin

K.A. McElhanon



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EDITORIAL CORRESPONDENCE:

The Editor,
PACIFIC LINGUISTICS,
Department of Linguistics,
School of Pacific Studies,
The Australian National University,
Box 4, P.O.,
Canberra, A.C.T. 2600.
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KAUGEL PHONEMIC STATEMENT

BRUCE L. BLOWERS

INTRODUCTION TO KAUGEL¹ DIALECT

I. The purpose of this statement is to acquaint missionaries with the symbols used in the phonemic alphabet for use in reading and writing dialects of the Hagen group herein described.

II. Background

The main dialect being described in this paper is the Kaugel dialect. Approximately eight thousand people speak this dialect. They live south of Mt Hagen, Western Highlands, in the Kaugel Valley which is about midway between Mt Hagen and Mendi, Southern Highlands.

Brief study in the Meyam dialect spoken at Pabarabuk confirms the hopes that, generally, the grammar, verb structure, and significant sounds, i.e. phonemic sounds, are the same for both areas. The dialectal differences are mainly vocabulary differences and thus it is hoped this Kaugel grammar will be of benefit in study of the Meyam dialect as well.

A brief study was also made of the Auwa dialect spoken north of Ialibu. Though the verb endings are considerably different in Auwa, yet sentence structure, general grammatical features, and phonemic sounds are the same as herein described.

The material was gathered from many native speakers between 1955 and 1959, but the main informants were Yano Kojili and Kukumindi Koltopo, boys in their late teens.

¹Gawigl is the Medlpa pronunciation of the name of the Kaugel river, language, or people. Gawigl is the term used by Gordon Bunn and Graham Scott, in their *Languages of the Mt. Hagen Sub-District* (DIES, Port Moresby, 1962). Kakoli is the form used in the language itself (phonemic spelling of Kaugel, which is the form used on Administration maps).

III. Method

This paper deals only with the phonological side of the Kaugel language. Another paper, "Kaugel Verb Morphology" (published in *Pacific Linguistics*, A25) deals with the forms of the verb, which is the most complicated grammatical element in Kaugel, and a necessary word in every sentence. Reference should be made to this paper as a foundation for the study of Kaugel grammar.

GENERAL NOTES ON KAUGEL PHONEMES

I. CONSONANTS

There are at least three main differences between the consonants of Kaugel and those of English.

A. There is no significant difference between a voiced consonant and a non-voiced one. That is, the vibration of the vocal cords is not a means of distinguishing words or forming new words. Thus, the difference between k and g, t and d, s and z, and p and b is not such that can change the meaning of words. In our writing therefore, these pairs of sounds are the same and receive only one symbol.

B. The places of articulation vary from the English pattern in that there is a set of consonants, i.e. l, j, t, and s, which are articulated by the tongue on the back of the teeth.

The dental lateral l especially is a very foreign sound to English. In the dental position it is said by pressing the tongue to the teeth and then drawing the edges of the tongue away from the sides of the mouth and forcing air through.

Preceding back vowels, this lateral is made in the palatal-velar region of the mouth and sounds much like a gl, though the tongue tip does not touch the front of the mouth to make the l sound.

C. There are four prenasalised stops and affricates which are called complex phonemes and have only one symbol. Phonetically they are:

1. Bilabial [mb] /b/
2. Dental [ndz] /j/
3. Alveolar [nd] /d/
4. Velar [ng] /g/

In the following chart the pattern of the consonantal phonemes is shown.

KAUGEL PHONEMES

Consonants:

	Bilabial	Dental	Alveolar	Velar
Voiceless Stops	p	t	(s)	k
Prenasalised Stops	b	d	j	g
Nasals	m	n		
Laterals			l l	l
Non-nasal Continuants	w	r	y	

Vowels:

	Front	Middle	Back
High	i		u
Mid	e		o
Low		a	

Note the two phonemes /s/ and /t/ in the line of voiceless stops. The /s/ is an affricated alveolar stop. The /t/ is a simple dental stop. In most dialects these two are only one phoneme. In other dialects they appear to contrast in similar environments and infrequently in identical environments. Therefore, both symbols will be used. In dialects where there is no contrast both symbols /s/ and /t/ will represent the phonetic sound [t^h] and all its allophones.

Stress in polysyllabic words is marked by the acute accent, in both phonetic and phonemic transcriptions.

II. VOWELS

A. Distribution of Vowels

1. Vowels occur in all positions in a word. Vowels also occur in clusters. Below is a list of vowels likely to be found together in a cluster.

Vowel Cluster List

All dentals can be followed by /i/:

iu /liuná/ 'a proper name'

io /olío/ 'we'

ie /sfewe/ 'cloudburst'

ia /kolfa/ 'place'

Others: ou /kou/ 'stone'; oi /koi/ 'stone'; au /aulká/ 'road'.

2. The above in some environments are interpreted as vowel clusters. In other environments a syllable break occurs between the two. When they occur as vowel clusters the low and back vowels (see chart) carry the syllabic emphasis - the low vowel having the greatest strength of emphasis.

Vowels occurring together with a syllable break between are:

ue /kibu.ébo/ 'I will fold.'
 ua /aku.ábo/ 'I will dig.'
 ui /pímu.i/ 'Are you crazy?'
 oe /tobó.e/ 'Will I hit?'
 ae /ta.é/ 'laugh'

B. Articulation of Vowels

1. The position of the vowels in the vowel chart should be noted, for the position of the vowel articulation affects the surrounding sounds' in the following manner.

a. The high back rounded vowel /u/ labialises stops that follow it. This is especially noticeable when the stop thus affected is followed by vowels /a/ or /e/, e.g.

[pu.mb^uá] /pu.bá/ 'He will go.'

b. The high front unrounded vowel /i/ palatalises the stops that follow it especially when the stop is followed by vowel /e/.

[ni.mbⁱé] /ni.bé/ 'He will speak.'

2. The position of the vowels (whether they are articulated as high vowels or mid and low vowels) greatly affects the vowels in the verb endings which are otherwise very regular. This is discussed fully in connection with the verb chart.

III. DISTRIBUTION OF PHONEMES

A. Segmental Phonemes

1. The distribution of the consonant phonemes in words is limited to the word-initial and word-medial positions. As a general rule no word ends in a consonant. In fact, all syllables are open syllables, i.e. end in a vowel. Note the syllable structure or syllable patterns.

Syllable Patterns:

V as in /i/ 'this'
 VV as in /ai/ 'chin'
 CV as in /no/ 'water'
 CVV as in /kolfa/ 'place'
 CCV as in /lko/ 'tear up'

2. As can be noticed in the syllable patterns only one pattern contains a consonant cluster, i.e. CCV. This cluster is always made up as follows:

Ik /mo.lkóro/ [mo.lkó ro] 'I am here.'

It /o.ltó/ [o.ltó] 'we two'

The first letter of a consonant cluster is always /l/, and the second always /k/, or /t/. No other consonants are found in combination with /l/ or any other consonant.

3. Frequently the last vowel of a word is silent or dropped in an utterance final position especially when the syllable begins with the consonant /m/.

/tokómo/ 'he is hitting', a three syllable word, often said [t^ho.gó.m], with the last vowel dropped.

B. Suprasegmental Phonemes

In the Kaugel dialect, stress is phonemic, it being often the only difference in words to change meaning. Stress can be predicted quite accurately in verb forms but not in other words.

IV. A DESCRIPTION OF THE SIGNIFICANT SOUNDS IN KAUGEL

In the following discussion, letters found in slanted lines / / are the symbols used in the Kaugel alphabet in use now. Letters found in square brackets [] are technical phonetic symbols to describe phonetically the sounds the alphabetic symbols stand for.

1. Stops

A characteristic of this language is that the stops are in pairs. Simple stops either voiced or voiceless and their counterparts, the pre-nasalised stops, are formed at the same place of articulation. This contrasts with English which has simple voiceless stops, and as their counterparts the voiced stops, i.e. p,b; k,g; t,d; etc.

1. /k/ [k^h] Voiceless aspirated velar stop; occurs word initially and before a final voiceless vowel.

/kéri/ [k^héři] 'bad'

/ki/ [k^hi] 'hand'

/kágo/ [k^hángo] 'boy'

/púku/ [p^húk^hy] 'you having gone'

[g] Voiced unaspirated velar stop; occurs word-medially.

/méku/ [mégu] 'vomit'

/kirikfri/ [k^hiřigři] 'sprout'

/kokéya/ [k^hogéya] 'rafter'

[gʲ] Voiced palatalised velar stop; occurs following /i/ and generally before /e/.

/kamiriké/ [k^hamiʃigʲé] 'belt'

/piké/ [p^higʲé] 'buddy'

[gʷ] Voiced labialised velar stop; occurs following /u/ and before /a/ or /e/.

/puké/ [p^hugʷé] 'a proper name'

/pulkanó/ [p^huigʷanó] 'blood vessel'

/imukábo/ [imugʷámbo] 'cut worm'

NOTE: There is no significant difference to the native between [k^h] and [g] so they both are symbolised by the same letter /k/.

2. /g/ [ŋg] Voiced prenasalised velar stop; occurs word-initially and medially; prenasalisation is lenis utterance initially.

/ugú/ [uŋgú] 'teeth'

/kógi/ [k^hóŋgi] 'pig'

/ga/ [ŋga] 'sweet potato'

[ŋk] Voiceless prenasalised velar stop; occurs in fluctuation with [ŋg] before a final unaccented vowel.

/kógi/ [k^hóŋkɿ] [k^hóŋgi] 'pig'

/mfi/ [mfiŋkɿ] [mfiŋgi] 'container'

[ŋgʷ] Voiced labialised prenasalised velar stop; occurs following /u/, before /a/ or /e/.

/nugá/ [nuŋgʷá] 'your'

/yugá/ [yuŋgʷá] 'his'

[ŋ] Voiced velar nasal; occurs word-medially in fluctuation with [ŋg] and [ŋk].

/kógi/ [k^hóŋi] [k^hóŋgi] 'pig'

/kágo/ [k^háŋo] [k^háŋgo] 'boy'

[ŋʷ] Voiced labialised velar nasal; occurs in fluctuation with [ŋgʷ].

/nugá/ [nuŋʷá] 'your'

3. /p/ [p^h] Voiceless aspirated bilabial stop; occurs word-initially and before a voiceless final vowel.

/péna/ [p^héna] 'outside yard'

/papú/ [p^habú] 'good'

/púpu/ [p^húpɥ] 'going'

[b] Voiced bilabial stop; occurs word-medially and before a voiced final vowel.

/papú/ [p^habú] 'good'
 /púpu/ [p^hubu] 'going'
 /kopé/ [k^hobé] 'stick'

[p^h] Voiceless bilabial affricate; occurs in fluctuation with [p^h] word-initially.

/pábo/ [p^hámbo] [p^hámbo] 'I intend to go'
 /pebá/ [p^hembá] 'It will sleep.'
 /pápu/ [p^hábu] 'good'

[bb] Voiced bilabial affricate; occurs word-medially between high vowels /u/ and /i/.

/ipupin/ [ibubbín] 'afternoon'

[b^w] Voiced bilabial labialised stop; occurs following /u/ and before /a/.

/kupá/ [k^hub^wá] 'cloud'
 /lupá/ [q^hub^wá] 'another'

4. /b/ [mb] Voiced prenasalised bilabial stop; occurs word-initially and word-medially. Prenasalisation is lenis utterance-initially.

/tobó/ [t^hombó] 'I will hit'
 /pábili/ [p^hámbi^tí] 'Let us (two) go.'
 /búlu/ [mbu^gu] 'back'

[mp] Voiceless bilabial prenasalised stop; occurs before a word-final voiceless vowel.

/pábo/ [p^hámpo] 'I will go.'
 /pábu/ [p^hámpy] 'Friday'
 /molábo/ [mo^gámpo] 'I will stay.'

NOTE: [mp] fluctuates with [mb] in the same way as the voiceless vowels fluctuate with voiced vowels.

[mb^w] Voiced labialised bilabial prenasalised stop occurs following /u/ and before /a/ or /e/.

[mb^y] Voiced labialised bilabial prenasalised stop; occurs following /i/ and before /e/.

/nibé/ [nimb^yé] 'He will speak.'
 /tibé/ [t^himb^yé] 'He will give.'

5. /t/ [t^h] Voiceless dental aspirated stop occurring word-initially before mid and low vowels /e/, /a/, and /o/.

/tobá/ [t^hombá] 'He will hit.'
 /tólo/ [t^hog^oo] 'spear'
 /táni/ [t^háni] 'You may hit.'

/tekéro/ [t^hegéřo] 'I am going.'
 /tápu/ [t^hábu] 'stick used in spirit worship'

[d̥] Voiced unaspirated dental stop; occurs word-medially.

/moté/ [modé] 'bamboo knife'
 /oltobá/ [o^hldombá] 'It will snap off.'
 /koltópo/ [k^ho^hldóbo] 'a proper name'

[ts̥] Voiceless dental affricate; occurs word-initially.

/tfe/ [ts̥fe] 'You give.' (command)
 /turúbu/ [ts̥uřúmbu] 'burnt sticks of wood'
 /tirigf/ [ts̥iřingf] 'drum'
 /tápo/ [ts̥ábo] 'male pig'

[dz̥] or [z̥]

Voiced dental affricate or fricative; occurs word-medially.

/kutá/ [k^hud̥z̥á] [k^huz̥á] 'salt'
 /ftiku/ [f̥dz̥igu] [f̥z̥igu] 'like this'
 /kitimára/ [k^hid̥z̥imára] [k^hiz̥imára] 'haphazardly'

6. /j/ [nt̥s̥] Voiceless prenasalised dental affricate; occurs before final voiceless vowel; prenasalisation lenis utterance-initially.

/ákuje/ [águn̥t̥s̥e] 'that, I suppose'
 /úju/ [ú̃n̥t̥s̥y] 'wood'

[nd̥z̥] Voiced prenasalised dental affricate; occurs word-initially and word-medially, and before final voiced vowel.

/úju/ [ú̃nd̥z̥u] 'wood'
 /jilfe/ [nd̥z̥igf̥e] 'marker'
 /pajikfru/ [p^h̃nd̥z̥igf̥u] 'I put on.'

7. /r/ [ř] Voiced alveolar flap; occurs before vowels /i/ and /u/ word-initially and word-medially.

/wirú/ [wiřú] 'a proper name'
 /ipirf/ [ibiřf] 'bird'
 /tikfru/ [t̥řigf̥u] 'I am giving.'

[ř̥] Voiceless alveolar flap occurs before final voiceless vowels /u/ and /i/.

/tikfru/ [t̥ř̥igf̥y] 'I am giving.'
 /nikfru/ [niř̥f̥y] 'I am speaking.'
 /kéri/ [k^héř̥i] 'bad'

[ř̥] Voiced alveolar trill occurs before low vowels /a/, /o/,

and fluctuates with [ʃ] before mid vowel /e/.

/tokóro/ [t^hogóřo] 'I am hitting.'

/porá/ [p^hořá] 'finish'

/pérele-márele/ [p^héřele-mářele] 'roll'

[ř] Voiceless alveolar trill occurs before final voiceless vowels.

/tokóro/ [t^hogóřo] 'I am hitting.'

/molkóro/ [molgóřo] 'I am staying.'

[tř] Alveolar trill occurs word-initially. Sound begins from a stop or just voicelessness. Fluctuates freely with [ř].

/ru/ [třu] 'call for'

/rábaye/ [třambaye] 'a proper name'

8. /d/ [nd] Voiced prenasalised alveolar stop; occurs word-initially and word-medially; prenasalisation lenis utterance-initially.

/kadí/ [k^handí] 'genuine'

/kodóli/ [k^hondóǵi] 'red'

/do/ [ndo] 'heavy'

/kadá/ [k^handá] 'pillow'

[nt] Voiceless prenasalised alveolar stop occurs before final voiceless vowels.

/kalorúdu/ [k^haglořúnty] 'I cooked.'

/nékedo/ [négentǵ] 'across'

/nídu/ [nínty] 'I spoke.'

2. Nasals

The only nasals written in this language are /m/ and /n/. The nasals found in combination with stops are not written since they are symbolised by the symbol of the particular stop, i.e. ng- /g/; nd- /d/; etc.

9. /m/ [m] Voiced bilabial nasal occurs word-initially and word-medially.

/mamá/ [mamá] 'uncle'

/tómu/ [t^hómu] 'it hit'

/momú/ [momú] 'frayed'

10. /n/ [n] Voiced alveolar nasal occurs word-initially and word-medially.

/no/ [no] 'water'

/konopú/ [k^honobú] 'thought'

/nodá/ [nondá] 'mushroom'

- [ŋ] Voiced dental nasal occurs only preceding a cluster of two vowels, the first of which is /i/.
 /niébo/ [ŋyémbó] 'I will speak.'
 /kinié/ [k^hiŋyé] 'now'
 /aminiokó/ [amiŋyogó] 'sore throat'

3. Non-nasal Continuants

11. /w/ [w] Voiced central resonant contoid, somewhat more close than the English /w/; occurs word-initially and word-medially; generally before low mid vowel /a/.
 /owá/ [owá] 'dog'
 /waíló/ [waíló] 'small'
 /wábo/ [wámbo] 'I will come.'
- [ɸ] Voiced bilabial fricative occurs word-initially and word-medially before vowels /e/ and /i/.
 /we/ [ɸe] 'purpose_{ly}'
 /wi/ [ɸi] 'upstream'
 /welia/ [ɸedɿya] 'hurry'
12. /ɣ/ [ɣ] Voiced dental (interdental) contoid; occurs in fluctuation with [y], especially between low and mid vowels.
- [y] Voiced palatal open contoid; occurs word-initially and word-medially.
 /ye/ [yⁱe] 'man'
 /óyo/ [óyo] 'You may come.'
 /yabó/ [yambó] 'people'

4. Laterals

13. /ɬ/ [ɬ] Voiceless dental laterally released affricate occurs word-initially and before final voiceless vowels /i/ and /e/ only.
 /libú/ [ɬimbú] 'I will take.'
 /kodóli/ [k^hondóɬi] 'red'
 /lekémo/ [ɬegémo] 'It is there.'
- [ɖ] Voiced dental fricative; occurs word-medially before vowels /i/ and /e/.
 /pilikíru/ [p^hiɖigíru] 'I understand.'
 /wálema/ [wáɖema] 'bags'
 /kálema/ [k^háɖemo] 'a needle'

- [l̥] Voiced dental lateral; occurs in cluster with consonant /t/.
 /oltó/ [oltó] 'we two'
 /ilté/ [ilté] 'handle'
 /elté/ [elté] 'you two'
- [g̥] Voiced velar laterally released affricate; occurs before central and back vowels /a/, /o/, and /u/.
 /lo/ [g̥o] 'rain'
 /óla/ [óg̥a] 'up'
 /lupá/ [g̥ub̥a] 'another'
- [l̥ʲ] Palatal lateral; occurs in cluster with consonant /k/.
 /olkó/ [olkó] 'punctured'
 /kolkóro/ [k^holkóro] 'I am dying.'
 /lkeramé/ [l̥ʲgeřamé] 'separate side'
- [g̥ʷ] Labialised backed lateral; occurs only following /u/ and followed by front vowel.
 /tulébo/ [t̥ʷug̥ébo] 'I'll chop.'
 /ipuléli/ [ibug̥éli] 'evening'
14. /l̥/ [l̥] Voiced flapped alveolar lateral occurs word-initially word-medially.
 /l̥l̥po-l̥l̥po/ [l̥l̥pól̥l̥pól̥] 'stutteringly'
 /tabollamogó/ [t^hamollamogó] 'wart'
 /allikúli/ [al̥ik^húli] 'tickle'

5. Vowels

All vowels may be voiceless at times in word-final unstressed syllables.

15. /i/ [i] High front unrounded vowel; sounding somewhat like the i in 'fit' and ee in 'feet'.
 /tikíru/ [t̥sigířu] 'I am giving.'
 /ibí/ [imbí] 'name'
 /kími l̥l̥po/ [k^hími l̥pól̥] 'lizard'
- [i̥]
 + High front unrounded vowel with friction; occurs following /l̥/ word-finally.
 /kodóli/ [k^hondóg̥i̥] 'red'
 /akúli/ [agúg̥i̥] 'dug'
 /tumúli/ [t̥sumut̥g̥i̥] 'gold-lip shell'
- [i^e] A vowel glide from high front to mid central; occurs only before /r/ and following dental /l̥/.

/lirímu/ [dʒi^eřímu] 'he took'

16. /e/ [e] Mid front vowel generally unrounded lax; occurs in all positions.

/enené/ [enené] 'they themselves'

/ke/ [k^he] 'moonrise'

/wále/ [wáɖe] 'bag'

- [i^e] Same as above with /i/ onglide when it follows /y/.

/ye/ [yⁱe] 'man'

/kamayé/ [k^hamayⁱé] 'pit pit'

/rábaye/ [tʃámbayⁱe] 'proper name'

17. /a/ [a] Low central unrounded open vowel becoming more mid word-finally and in unstressed syllables.

/amá/ [amá] 'mother'

/kágo/ [k^hango] 'boy'

/kakará/ [k^hagará] 'boisterous'

18. /o/ [o] Mid back rounded open vowel found in all positions.

/obá/ [ombá] 'He will come.'

/tokómo/ [t^hogómo] 'He is hitting.'

/totó/ [t^ho^ht^hó] 'grandfather'

19. /u/ [u] High back rounded close vowel found in all positions.

/urú/ [uřú] 'sleep'

/ultú/ [uɭɖzú] 'outside'

/turú/ [tsuřú] 'fright'

NOTE: /s/ is used in transliterated words:

/jisase/ 'Jesus'

/tisa/ 'teacher'

/pikisa/ 'picture'

BUIN DIRECTIONALS

MARGIE GRIFFIN

1. Introduction.
2. Compound Direction/Location Stems.
3. Compound Direction Stems.
4. Compound Locale Stems.
5. Nominalisations.
6. Conclusion.

1. INTRODUCTION

In Buin¹, orientation to the compass points 'north', 'south', 'east' and 'west' is important in mentioning where someone is going to or coming from; in directing one another in housebuilding, gardening or other work; and in numerous other daily situations.

¹Buin is a non-Austronesian language spoken by approximately 9000 people living in the southern part of Bougainville, Territory of Papua and New Guinea. Buin is part of the Nasioi-Nagovisi-Siwai-Buin language stock and the Buin-Siwai language family. (See Gerald Allen and Conrad Hurd, *Languages of the Bougainville District*, Department of Information and Extension Services, Port Moresby, 1965.)

This paper was prepared with the help of a 47,000 morpheme concordance of Buin texts made on the IBM 1410 computer at the University of Oklahoma by the Linguistic Information Retrieval Project of the Summer Institute of Linguistics and the University of Oklahoma Research Institute, and sponsored by Grant GS-270 of the National Science Foundation. My colleagues of the Summer Institute of Linguistics, Elizabeth Murane and Charles Peck, have helped to prepare this paper for publication.

Buin phonemes are a e i o u p t k g r m n ŋ. The g occurs only word-medially. Every vowel is a syllable nucleus (six in sequence are known to occur) and nasals are syllabic when they occur before consonants word-initially. In word-final occurrences all three nasals are in free variation.

These four directions each have two allomorphs, except for 'south' which has four: rato ~ raa(+) 'north'; rito ~ ree(+) 'west'; poko ~ poo(+) 'east'; and roto ~ roo(+) ~ rennegu ~ reregu 'south'; where the (+) symbol signifies that the allomorph is obligatorily followed by another stem or by a suffix. These direction stems may enter into compound stem combinations which may then be nominalised or may receive further directional suffixes.

For convenience, the allomorphs rato 'north', rito 'west' and poko 'east', are classified as type 1 allomorphs, while raa 'north', ree 'west' and poo 'east' are type 2. The allomorphs of 'south' are irregular and are treated separately.

2. COMPOUND DIRECTION/LOCATION STEMS

In compound direction/location stems, the first member is a direction morpheme and the second is a location morpheme meaning 'side of'. The location morphemes are (+)ropere 'side of mountain'; (+)ropere ~ (+)pere 'side' or 'side toward'; (+)routu 'side of water'; (+)rogu 'side of road'; (+)rougei 'side of roof'; and (+)rui 'one'.

2.1. The location morpheme ropere 'side of mountain' occurs with type 1 stem allomorphs and with only the rennegu allomorph of 'south'.

rato-ropere	'north side of the mountain'
rito-ropere	'west side of the mountain'
poko-ropere	'east side of the mountain'
rennegu-ropere	'south side of the mountain'

re rito-ropere mimim

(we west-side-of-mountain we-are-going)

'We are going to the west side of the mountain.'

2.2. The location morpheme ropere ~ pere 'side' or 'side toward' occurs with type 2 allomorphs and with rennegu ~ reregu 'south' (pere occurs only with reregu).

raa-ropere	'north side'
ree-ropere	'west side'
poo-ropere	'east side'
rennegu-ropere	'south side'
reregu-pere	'south side'

kuio poo-ropere kuruom

(tree-at east-side he-went-around)

'He went around the east side of the tree.'

2.3. The location morpheme routu 'side of water' occurs with type 2 stem allomorphs and with rennegu ~ reregu 'south'.

raa-routu *'north side of the water'*
 ree-routu *'west side of the water'*
 poo-routu *'east side of the water'*
 rennegu-routu *'south side of the water'*
 reregu-routu *'south side of the water'*

nne reregu-routu memmemme

(I south-side-of-water I-am-going)

'I'm going to the south side of the river.'

2.4. The location morpheme rogu 'side of road' occurs with type 2 stem allomorphs and with rennegu ~ reregu 'south'.

raa-rogu *'north side of the road'*
 ree-rogu *'west side of the road'*
 poo-rogu *'east side of the road'*
 rennegu-rogu *'south side of the road'*
 reregu-rogu *'south side of the road'*

raa-rogu toi rakumom

(north-side-of-the-road future I-jump)

'I will jump on the north side of the road.'

2.5. The location morpheme rougei 'side of roof' occurs with type 2 stem allomorphs and with rennegu ~ reregu 'south'.

raa-rougei *'north side of roof'*
 ree-rougei *'west side of roof'*
 poo-rougei *'east side of roof'*
 rennegu-rougei *'south side of roof'*
 reregu-rougei *'south side of roof'*

ako opo ta raa-rougei temmo uratogim

(it house it north-slope-of-roof already we-made-it)

'We have already made the north slope of the roof of the house.'

ako opo ta reregu-rougei titikimpoipui

(it house it south-slope-of-roof it-became-tattered-for-it)

'The south slope of the roof is tattered for the house.'

or

'The south slope of the roof of the house is tattered.'

2.6. The indefinite localiser morpheme rui 'one' occurs with type 2 stem allomorphs and rennegu ~ reregu 'south'.

raa-rui *'north one'*

ree-rui *'west one'*
 poo-rui *'east one'*
 rennegu-rui *'south one'*
 reregu-rui *'south one'*

ta maikuna poo-rui auaurugu
(that dog east-one it-is-barking)
'The east dog is barking.'

ako reregu-rui kunkupogu
(he south-one he-is-leaving)
'The south one is leaving.'

2.7. Compound direction/location stems, along with type 1 direction stem allomorphs and roto ~ rennegu *'south'* may occur without further affixes. The examples above illustrate compound stems without affixes. Type 1 stems and roto ~ rennegu occur without affixes in the following example

tigirai rato rogui
(there-from north he-got-it)
'He got it from the north.'

ako roto rugorui
(he south he-walked)
'He walked to the south.'

tege rennegu
(there-at south)
'There at the south.'

ia rennegu noke pogiago
(here south one snake)
'A snake is here to the south.'

nne e rito patagoti
(I here west I-arrived)
'I arrived here at the west.'

2.8. The simple and compound direction/location stems mentioned in the previous section also occur with the suffixes -ogo *'and'* or *'also'*, -ge ~ -gere ~ ere *'at'* or *'on'*, -ga *'from'* (source) and -girai *'from'* (direction). (The allomorph -ge occurs with simple stems and compound stems with ropere *'side of the mountain'*, ropere ~ pere *'side'*, routu *'side of water'* and rogu *'side of road'*. The allomorphs -gere ~ -ere occur on compound stems containing rougei *'side of roof'* and rui *'one'*.)

nne rito-ogo mei
 (I west-also I-went)
 'I went west also.'

mururu roto-ge onoru
 (rain south-at it-is-raining)
 'It is raining in the south.'

ia ite poko-ga airui
 (he child east-from he-found it)
 'He found the child in the east.'

ia karasi poko-girai kinatui
 (this grass east-from it-grew-up)
 'This grass grew up (spread) from the east.'

roi poko-roperere-ogo pukuom
 (person east-side-of-mountain-also he-shouted)
 'A person also shouted at the east side of the hill.'

roi poko-roperere-ge pukuom
 (person east-side-of-mountain-at he-shouted)
 'A person at the east side of the hill shouted.'

kui rato-roperere-ga roguro
 (tree north-side-of-mountain-from he-got-it)
 'He got wood from the north side of the hill.'

paa rito-roperere-girai unungu?
 (who west-side-of-mountain-from he-is-coming)
 'Who is coming from the west side of the mountain?'

ree-roperere-ogo toi mei
 (west-side-also future I-go)
 'I will go to the west side too.'

ako roi reregu-pere-ge tuntuntu
 (he person south-side-at he-is-living)
 'That person lives on the south side.'

nne poo-roperere-girai mui
 (I east-side-from I-came)
 'I came from the east side.'

rennegu-routu-ge mara tuntuntu
 (south-side-of-water-at spirit it-is-living)
 'A spirit lives at the south side of the water.'

ako kui reregu-rogu-ge tuntuntu
 (that tree south side of the road at it-is-living)
 'That tree is at the south side of the road.'

ako perekupa ako kui poo-rui-ere tuntuntu
 (it bird it tree east-one-on it-is-living)
 'The bird is on the east tree.'

nne opo poo-rui-gere nunnunnu
 (I house east-one-on I-am-existing)
 'I am living in the east house.'

nne opo poo-rui-girai mui
 (I house east-one-from I-came)
 'I came from the east house.'

iko puutu poo-rougei-ere tupario
 (it tobacco east-slope-of-roof-on you-dry-it)
 'Dry that tobacco on the east slope of the roof.'

ako perekupa ree-rougei-gere kookoogui
 (it bird west-slope-of-roof-on it-is-sitting)
 'That bird is sitting on the east slope of the roof.'

ako opo ta raa-rougei-ogo titikimpoipui
 (it house it north-slope-of-roof-also it-became-tattered-for-it)
 'The north slope of the roof of the house is tattered.'

3. COMPOUND DIRECTION STEMS

Compound direction stems (distinguished from compound direction/location stems) are formed by a sequence of two direction stems and occur with ropo 'toward' and giro 'from'.

3.1. Two direction stems may be concatenated to form an intermediate direction. Only type 1 stem allomorphs and roto 'south' participate in this construction.

roto-rito or rito-roto 'southwest'
 rato-rito or rito-rato 'northwest'
 rato-poko or poko-rato 'northeast'
 roto-poko or poko-roto 'southeast'

e roto-rito pempempe
 (here south-west he-is-going)
 'He is going to the southwest.'

3.2. Type 1 stem allomorphs and roto 'south' occur with ropo 'toward'.
 re toi polo-ropo kuromoim
 (we future east-toward we-run)
 'We will run eastward.'

urugito poo-giro muamuaka
 (pig east-from they-are-carrying-it)
 'They are carrying a pig from the east.'

Intermediate directions with giro 'from' are formed by a type 1 stem allomorph or roto 'south' followed by a type 2 stem allomorph or roo 'south' followed by giro.

roto-ree-giro	or	rito-roo-giro	'from the southwest'
rato-ree-giro	or	rito-raa-giro	'from the northwest'
roto-poo-giro	or	poko-roo-giro	'from the southeast'
rato-poo-giro	or	poko-raa-giro	'from the northeast'

roto-ree-giro unungu
 (south-west-from he-is-coming)
 'He is coming from the southwest.'

3.3. Compound direction stems may be followed only by the suffix -ogo 'also'.

e roto-rito-ogo mei
 (here south-west-also I-went)
 'I also went to the southwest.'

roo-giro-ogo uouotopa
 (south-from-also they-are-bringing-it)
 'They are bringing it from the south also.'

4. COMPOUND LOCALE STEMS

Compound locale stems are formed by type 2 stem allomorphs plus the u ~ ru locale morpheme. Allomorphs of 'south' do not enter into this construction but reregu ~ rennegu 'south' occur without the u ~ ru in corresponding contexts. In the following examples, the compound locale stems are contrasted with the free-form type 1 stem allomorphs.

ako rato unungu
 (he north he-is-coming)
 'He is coming (toward the) north.'

ako raa-u unungu or ako raa-ru unungu
 (he north-locale he-is-coming)
 'There in the north he is coming.' (movement in any direction)

ako rato pempempe
 (he north he-is going)
 'He is going north.' (moving northward)

ako raa-u pempempe or ako raa-ru pempempe

(he north-locale he-is-going)

'There in the north, he is going.' (moving in any direction)

ako rato rugorui

(he north he-walked)

'He walked north.' (moving northward)

ako raa-u rugorui or ako raa-ru rugorui

(he north-locale he-walked)

'There in the north, he walked.' (moving in any direction)

In the examples above, the demonstrative pronoun *ako* is optional in those sentences with the type 1 free stem allomorph *rato* but is obligatory in the sentences with the *u ~ ru* locale morpheme.

5. NOMINALISATIONS

It may have been noted that the compound direction/location stems sometimes function as locational nouns and sometimes as noun modifiers. Those with *rui* 'one' frequently function as nouns.

nne ako raa-rui rogomino

(I that north-one I-got-it)

'I got that north one.'

5.1. Simple direction stems are nominalised by the addition of *-nke*. Type 1 stem allomorphs and *roto* 'south' enter into this construction.

ia rugam rato-nke

(this man north-person)

'This man is a northerner.'

5.2. Compound direction/location stems are nominalised by the addition of *-nai*.

ako roi rato-ropere-nai

(he person north-side-of-the-mountain-person)

'That person is from (lives at) the north side of the mountain.'

tuuo raa-ropere-nai

(water-at north-side-person)

'He lives at the north side of the water.'

or

'He's from the north side of the water.' (in the sense that that is his habitual dwelling place)

kuio ree-ropere-nai

(tree-at west-side-person)

'He lives at the west side of the tree.'

menuo reregu-pere-nai

(mountain-at south-side-person)

'He lives at the south side of the mountain.'

menuo rennegu-ropere-nai

(mountain-at south-side-person)

'He lives at the south side of the mountain.'

In the above four examples, when the nominalised direction with *ropere* ~ *pere* 'side' is preceded by a specific object or point of reference, any one of the four direction stems may occur in the nominalised direction stem. But when, as in the next two examples, there is no object of reference preceding the direction word, only 'east' and 'west' can occur with this construction.

ree-ropere-nai

(west-side-person)

'Westerner'

poo-ropere-nai

(east-side-person)

'Easterner'

This is a reflection of the geography of the Buin area. Although 'north' and 'south' are not used in this way, the geographic picture is filled out by the non-directional words *kugara* 'highlander' (the generally northern part of the Buin territory) and *nomororai* 'coastal person' (the generally southern part of the area).

Further examples of -nai follow:

nne ree-routu-nai

(I west-side-of-water-person)

'I am from the west side of the water.'

re rennegu-rogu-nai

(we south-side-of-the-road-person)

'We are from (live at) the south side of the road.'

rai raa-rougei-nai?

(you north-slope-of-roof-person)

'Are you the people who put the sago on the north slope of the roof?'

nne opo poo-rui-nai

(I house east-one-person)

'I live in the east house.'

5.3. Certain compound stems may be made into possessive nominals by the addition of -nke (same morpheme as in 5.1., but different usage).

ako opo-nke kukum minei poo-rui-nke

(it house-possessive bearer post east-one-possessive)

'The bearer for the house is for the east post.'

ako rugam konno rennegu-rougei-nke touno kotui

(he man sago-leaves south-slope-of-roof-possessive negative he-finished-it)

'That man has not finished the sago leaves for the south slope of the roof.'

6. CONCLUSION

The Buin direction stems enter into combinations with themselves, with location stems and with the locale stem to make a rather extensive inventory of location or direction words.

SELEPET PRONOMINAL ELEMENTS

K.A. McELHANON

0. INTRODUCTION

A simple listing of pronominal forms and their distribution does not constitute an adequate description of the pronoun morphology in Selepet.¹ A recent development in the analyses of complex morphological systems is the matrix technique developed by K.L. Pike which provides insight into the internal patterning of morphemic systems of great complexity.² This patterning is graphically displayed in matrices which indicate the formatives, the vectors and the categories. The formatives are phonological particles filling the cells of the matrix. The vectors are contrastive rows or columns in the matrix (e.g. columns indicating singular, dual and plural number). The categories are the meanings of emic vectors. The formative is relevant to phonology, the vector to grammar, and the category to semantics; the total being a form-meaning composite.

An application of the matrix technique to Selepet morphology reveals that underlying all of Selepet morphology is a basic stock of formatives which are combined in various ways to indicate person and number. In order to adequately analyse the morphology of any one word class, one has to simultaneously analyse the morphology of all of the word classes in order to identify the formatives and alloformatives. This is necessary because formatives which are not readily apparent in one word class may be more apparent in another. For example, the alloformatives *â* and *k* indicating 'singular' occur only in the 3s suffix of the inchoative future verb and certain personal pronominal forms.³

Selepet pronominal elements indicate seven distinctions of person and number: 1s, 1d, 1p, 2s, 2-3d, 2-3p and 3s. In some instances third person may be distinguished from second person in the dual and plural number by the compounding of the 3s form before the dual or plural form.

The Selepet pronominal elements include both free and bound forms. The free forms include three word classes: the personal pronouns which substitute for the core of the General Noun Phrase and thus may be further qualified by peripheral elements of the General Noun Phrase; the indefinite pronouns which occur in the third order post-Head tagmeme of the General Noun Phrase; and the demonstrative pronouns which occur in the fourth order post-Head tagmeme of the General Noun Phrase. The class of demonstrative pronouns is divided into two subclasses, the regular demonstrative pronouns and the interrogative demonstrative pronouns, on the basis of their distribution in clause and phrase level tagmemes. The bound forms include the pronominal object and benefactive verbal affixes and the nominal possession-marking suffixes.

1. PERSONAL PRONOUNS

Matrix 1 summarises the distribution of the various subclasses of the personal pronoun within the axes of axis-relator phrases and in the object tagmeme. Except for the object tagmeme all other clause level tagmemes manifest axis-relator phrases: Subject Axis-relator phrase (Sub-Ar.), Accompaniment Axis-relator phrase (Acc-Ar.), Possession Axis-relator phrase (Poss-Ar.), Benefaction/Cause Axis-relator phrase (B/C-Ar.) and Location Axis-relator phrase (Loc-Ar.). These phrases all consist of an axis followed by a relator enclitic or relator word. In Matrix 1, x = occurrence, --- = non-occurrence and the notation (sub.) indicates that the pronominal form substitutes for the axis-relator phrase as the filler of the clause level tagmeme. The notation (Poss-Ar.) indicates that the pronominal form occurs in the axis of the Possession Axis-relator phrase which in turn occurs in the axis of the Location Axis-relator phrase.⁴

Matrix 1: Distribution of personal pronoun subclasses

1s form	Obj.	Sub-Ar.	Acc-Ar.	Poss-Ar.	B/C-Ar.	Loc-Ar.
(1) nâ	x	x	x	x	x	(Poss-Ar.)
(2) nâku	x	(sub.)	x	(sub.)	---	---
(3) nine	x	(sub.)	x	(sub.)	x	x
niniâk	x	x	x	---	x	---

1.1. REGULAR PERSONAL PRONOUNS

The regular personal pronoun is a person-number composite in which the formatives, vectors and categories are clearly distinguishable.

These are presented in Matrix 2. The linear order of the vectors in the realised forms is person (indicated by the formatives *n* 'first', *g/y* 'second' and *y* 'third'), number (indicated by the formatives *â* 'singular' and *e* 'non-singular') and number (indicated by the formatives *k* 'singular', *t* 'dual' and *n* 'plural').⁵

Matrix 2: Selepet regular personal pronouns

		Sg. Sg.		non-Sg. Du.			non-Sg. Pl.		
		(â)	(k)		(e)	(t)		(e)	(n)
1st per. (n)	n	â	k	n	e	t	n	e	n
2nd per. (g/y)	g	â	k	y	e	t	y	e	n
3rd per. (y)	y	â	k	(yâk)y	e	t	(yâk)y	e	n

The formative *k* 'singular' is lost in all the first and second person regular personal pronoun forms except when the contrastive suffix {-ku} -ku ~ -gu ~ -hu is added (see 1.2.). The distinction between second and third person is absent in the dual and plural forms but this lack of distinction is overcome by the compounding of the 3s form *yâk* with the dual and plural forms to specify third person.

Context indicates in most cases whether second or third person is to be inferred in the use of the ambiguous forms. In forms of address, commands, etc., the forms *yet* or *yen* refer only to the second person. In narrative structure, when *yet* or *yen* refer to the second person, these forms always occur within a quotative as the object of the verb *nâgâ* 'to think' or *sâ* 'to say'. When the forms refer to the third person, the referent is clearly stated. Once the referent is stated, however, the ambiguous pronominal forms are used freely without further specification unless another referent intervenes. When another referent intervenes, the original referent is again brought into focus either by restating the referent or using the third person form *yâk* before the ambiguous forms are again used for indicating the third person.

- (a) *sihan yen nengâlân torokatnomai yawu sâm*
young you with us you/they will join thus saying
'saying thus, "You young men must join us"..."'
- (b) *atalipne kapam pato ahom tatmâ yene ahom ba tatmâ*
his elder stick big fighting staying you/ fighting go staying
brothers they
'his elder brothers fought hard and stayed there, they fought and went and stayed...'

The 3s pronoun *yâk* occurs in the subject or object tagmemes without regard to number, the number of the subject or object being indicated in

nen-ŋe hân-gât pân pân yawu mansin
 we-sub. ground-for searching thus we live
 'We live always searching for ground.'

(3) Accompaniment Axis-relator phrase. The Acc-Ar. manifest the relator word orop 'with'. The regular personal pronouns occur as free forms in the axis. Note that yâk does not occur with yet or yen to distinguish third person.

nâ orop 'with me'
 yen orop 'with you'
 yâk orop 'with her/him/them'

(4) Benefaction/Cause and Possession axis-relator phrases. These phrases both occur with the relator enclitic {-gât} -gât ~ -kât ~ -hât but are distinguishable in that whereas the former is relevant to the clause level and is permutable, the latter is relevant to the phrase level and always precedes and qualifies the Head of a General Noun Phrase. When the regular personal pronoun occurs in the Benefaction/Cause tagmeme it agrees in person and number with the pronominal benefactive-marking verbal suffixes.

(a) ya ye-gât herŋe ot-yingi-mini-wi
 those them-for friendliness did-for them-used to-they
 'They used to be well pleased with them.'

(b) ya yet-gât herŋe ot-yitki-mini-wi
 those them(du.)-for friendliness did-for them(du.)-used to-they
 'They used to be well pleased with the two of them.'

When the regular personal pronoun occurs in the axis of Poss-Ar. with the enclitic {-gât} the resulting form shows normal possession. The regular personal pronoun agrees in person and number with the nominal possession-marking suffixes (if any) on the noun qualified by the Poss-Ar.⁸ In this regard the pronominal forms duplicate much of the information given in the possession-marking suffixes but have the additional clarification of person when yâk occurs before the forms yet or yen. The resultant forms are given in Matrix 4.⁹

Matrix 4: Regular personal pronouns showing possession

	Sg.	Du.	Pl.
1st per.	nâhât	netkât	nengât
2nd per.	gâhât	yetkât	yegât
3rd per.	yâkât	(yâk)yetskât	(yâk)yegât

The compound personal pronoun forms yâkyet and yâkyen are usually

used to distinguish third person. Occasionally, however, the personal pronouns *yet* and *yen* occur in apposition to a noun or proper name and so third person is indicated without the occurrence of *yâk*.

- (a) *yet-gât emet* (*you(du.)-poss., house*) '*your(du.) house*'
- (b) *yâkyet-gât emet* (*them(du.)-poss., house*) '*their(du.) house*'
- (c) *amerika yâkye-gât orotmeme* (*America, them-poss., customs*) '*the customs of those Americans*'
- (d) *amerika ye-gât âi* (*America, them-poss., work*) '*the work of those Americans*'
- (e) *atalipne ye-gât kâiyenan* (*his el.brs., them-poss., on their legs*) '*on his brothers' legs*'

When occurring in the axis of the Poss-Ar. the pronoun *yâk* in the compound forms *yâkyet* and *yâkyen* is often replaced by the demonstrative pronouns *yu* '*this, these*' or *ya* '*that, those*', particularly if the referent is non-human.

- (a) *amerika ya ye-gât sum* (*America, those, them-poss., graveyard*) '*the graveyard of those Americans*'
- (b) *nak ya ye-gât topyenan* (*trees, those, them-poss., at their bases*) '*at the base of those trees*'

Occasionally the regular personal pronoun occurs alone in the possession tagmeme with the possession-marking nominal suffixes occurring obligatorily on the possessed noun if it occurs in the Head of the General Noun Phrase. The result is emphasis:

nâ emet-ne (*me, house-my*) '*MY house*'

(5) Location Axis-relator phrase. The regular personal pronouns usually do not occur in the axis of the Loc-Ar.¹⁰ Rather, the Poss-Ar. manifesting the regular personal pronoun in its axis occurs embedded in the axis of the Loc-Ar.

- (a) *nâhâlân* (*nâ-gât-ân me-poss.-at*) '*with me*' (lit. '*at my (place)*')
- (b) *nâhâlângen* (*nâ-gât-ângen me-poss.-towards*) '*towards me*'
- (c) *nâhâlângembâ* (*nâ-gât-ângembâ me-poss.-from*) '*from me*'
- (d) *nengâlâbâ* (*nen-gât-âbâ us-poss.-out of*) '*out from among us*'

1.2. CONTRASTIVE PRONOUN FORMS

The regular personal pronoun may be modified to indicate contrast by the suffixation of the morpheme {-ku} -ku ~ -gu ~ -hu.¹¹ The resulting forms emphasise that the person so identified is contrasted with other persons. For instance, when a host distributes food to a group of guests but omits one person, the omitted person could say, *nâku bia* (*I-contrastive morpheme, no*) which freely translated means '*But what*

about me!'. The 3s form *yâku* is regularly used with inanimate referents and fulfills the semantic distinctions of the demonstrative pronouns which do not occur with the morpheme {-ku}. The resulting forms are given in Matrix 5.

Matrix 5: Regular personal pronouns showing contrast

	Sg.	Du.	Pl.
1st per.	<i>nâku</i>	<i>netku</i>	<i>nengu</i>
2nd per.	<i>gâku</i>	<i>yetku</i>	<i>yengu</i>
3rd per.	<i>yâku</i>	<i>yâk(yet)ku</i>	<i>yâku</i> or <i>yâkyengu</i>

These pronouns occur only with future tense verbs and have a limited distribution:

(1) Subject tagmeme.

nâku ariwom 'I will go (not anyone else).'

(2) Object tagmeme.

nâku nohowuap 'He will hit me (and no one else).'

(3) Possession tagmeme. When the pronouns showing contrast occur in the possession tagmeme the possession-marking nominal suffixes also occur on the noun if it occurs in the Head of the General Noun Phrase.

nâku emet-ne (my, house-my) 'my house and no one else's'

(4) Accompaniment Axis-relator Phrase.

gâ nâku orop arirom

you me with we(du.) will go

'You will go with me and no one else.'

The contrastive pronominal forms are intensified by the occurrence of the second element of the emphatic pronoun composites (see 1.6.2.) in a post position.

nâku niniâk tatbom

(I, myself, I will remain)

'I will remain alone by myself.'

1.3. COMPARATIVE PRONOUN FORMS

The regular personal pronoun may occur with the unrestricted suffix -ââm 'however, on the other hand' showing comparison.¹² The resulting forms are given in Matrix 6.

Matrix 6: Regular personal pronouns showing comparison

	Sg.	Du.	Pl.
1st per.	nâmâ	nerâmâ	nenâmâ
2nd per.	gâmâ	yerâmâ	yenâmâ
3rd per.	yâhâmâ	yâhâmâ	yâhâmâ

yenâmâ den waialesiân agimai
you-however talk on radios you give one another
'You [Europeans], however, always talk to one another on the two-way radios.'

1.4. INCLUSIVE PRONOUN FORMS

The regular personal pronoun also occurs with the inclusive (incl.) suffix {-bân} -bân ~ -wân 'too, also'. When suffixed to nouns this suffix focuses attention on the items subclassed under the noun, and can best be translated as 'all kinds of' or 'different kinds of'. Thus *lokbân* (man-incl.) focuses attention on the various groups of people: 'Europeans, New Guineans, Chinese, Japanese, etc.' and *gokawân* (sweet potato-incl.) focuses attention on all the various sweet potato cultivars. When the suffix is added to the personal pronouns the pronoun includes its referent plus someone else. The resulting forms are given in Matrix 7.

Matrix 7: Regular personal pronouns showing inclusion

	Sg.	Du.	Pl.
1st per.	nâwân	netbân	nenbân
2nd per.	gâwân	yetbân	yenbân
3rd per.	yâkbân	yâk(yet)bân	yâk(yen)bân

These pronouns have a very limited distribution:

(1) Subject tagmeme. The pronouns occur both in the subject tagmeme and in the axis of the Sub-Ar. The verbal subject-marking suffixes in the same clause occur in the plural number.

nâwân tatnom (I-also, we will remain) 'We will remain (you and I and a third party).'

(2) Object tagmeme. The pronominal object-marking suffix of the verb in the same clause occurs in the plural number.

nâwân ningiwuap

I-also he will give us

'He will give it to us (you and I and a third party).'

nâwân orop netjiâk pirinenehop

I-also with ourselves(du.) he washed us(pl.)

'He baptised us, not only you but also me.'

1.5. EXCLUSIVE PRONOUN FORMS

When the regular personal pronoun occurs in the object tagmeme it is often suffixed by the unrestricted suffix {-âk} -âk ~ -ek ~ -ok 'only' and shows emphasis or exclusion. The resulting forms are given in Matrix 8.

Matrix 8: Regular personal pronoun showing exclusion or emphasis

	Sg.	Du.	Pl.
1st per.	nâek	nelâk	nenâk
2nd per.	gâek	yelâk	yenâk
3rd per.	yâhâk	yâhâk	yâhâk

nâek nohom arap

me-only hitting me he went away

'He hit only me and went away.'

1.6. THE EMPHATIC PERSONAL PRONOUNS

1.6.1. The basic forms of these pronouns occur only in the singular number: nine 'I myself, my, mine'; gike 'you yourself, your, yours'; and ikne 'he himself, she herself, his, her, hers, its'. The pronoun has the following distribution:

(1) Subject tagmeme. The emphatic pronouns occur in the subject tagmeme rather than in the axis of Sub-Ar.

nine topje sâmune nâgâ

I-myself its basis I tell you listen

'Listen to ME as I tell about it!'

(2) Object tagmeme

gike kâit-gohom

you-yourself tricking-you

'tricking YOU'

(3) Possession tagmeme. In the possession tagmeme the emphatic pronoun substitutes for the Poss-Ar. and concord exists between person-

number of the emphatic pronoun and the possession-marking nominal suffixes of following noun if that noun occurs in the Head tagmeme of the General Noun Phrase.

nine emet-ne (MY, house-my) 'MY house'

gike emet-ge (YOUR, house-your) 'YOUR house'

If the following noun is in the attributive tagmeme of the General Noun Phrase then it does not occur with possession-marking suffixes.

nine emet gowetqan (MY, house, underneath it) 'underneath MY house'

When the emphatic pronoun occurs in the possession tagmeme all other units of the General Noun Phrase are frequently absent.

gokorok yu gerek gulip tuhum, nine niap

chicken these all doing away with mine it ate it

'It (a dog) did away with all the chickens and ate MINE (too).'

(4) Benefaction/Cause Axis-relator phrase

ikqe-gât gâiakmâ mem tipi tapi tuhum

himself-for cutting himself holding in small pieces doing

'He held and cut himself in small pieces to his own advantage...'

(5) Location Axis-relator phrase. The locative enclitic is {-ân} -ân ~ -en.

selepet ikqe-ân yanâmâ idumqe tatbi

Selepet itself-at there-however Indum they stayed

'The Indum people, however, stayed there at Selepet village itself.'

(6) Accompaniment Axis-relator phrase

yâk nine orop takawit

he me-alone with we(du.) came

'He came with me alone.'

1.6.2. The emphatic pronoun has an alternate structure consisting of an optional regular personal pronoun followed by a second pronominal form suffixed by the suffix {-âk} 'only'. In the singular number the second forms are the emphatic pronominal forms given in section 1.6.1. but in the dual and plural numbers the forms are: netqe 1d, yetqe 2-3d, nenqe 1p and yeqe 2-3p. The final vowels of the second form change from e to i when the suffix -âk is added. Some speakers, however, do not always make this vowel change in the dual and plural forms. When the optional regular personal pronoun occurs, the resulting composite form shows greater emphasis. These forms are given in Matrix 9.¹³

Matrix 9: Emphatic pronoun--2

	Sg.	Du.	Pl.
1st per.	(nâ) niniâk	(net) netŋiâk	(nen) nenŋiâk
2nd per.	(gâ) gikiâk	(yet) yetŋiâk	(yen) yenŋiâk
3rd per.	(yâk) ikŋiâk	(yâk) yetŋiâk	(yâk) yenŋiâk

These forms have the following distribution:

(1) Subject tagmeme. The form may occur free in the subject tagmeme or in the axis of Sub-Ar. with the enclitic -ŋe (sub.).

nâ niniâk ariwom (*I, myself, I will go*) '*I myself will go.*'

nâ niniâk-ŋe kuan (*I, myself-sub., I killed it*) '*I killed it myself.*'

(2) Object tagmeme. In the object tagmeme the emphatic pronouns usually occur without the preposed regular personal pronouns.

gikiâk ge gohom negekmâ yâhâwuap
you yourself descending killing you eating you it will ascend
'It will descend, kill and eat only you and go back up.'

(3) Possession tagmeme. The emphatic pronoun--2 does not occur in the possession tagmeme; rather this distinction appears to be shown by the regular personal pronoun with the morpheme {-ku} showing contrast.

(4) Benefaction/Cause Axis-relator phrase. The relator enclitic is {-gât}.

nâ niniâk-gât yap '*He spoke only about me.*'

(5) Location tagmeme. This pronoun form does not occur in the location tagmeme; see the basic forms (1.6.1.).

(6) Accompaniment Axis-relator phrase. When the emphatic pronoun--2 occurs in the axis, the relator word orop '*with*' is permuted to a pre-axis position.

orop netŋiâk '*with us(du.) only*'

orop yenŋiâk '*only with them*'

1.6.3. An alternate morphological shape occurs when the morphophonemic rule $e + â \rightarrow a$ is in effect. The structure is the same as that of 1.6.2. but the phonological realisation is different. These forms have been observed only in the subject tagmeme and are less emphatic than those of 1.6.1., particularly when the forms are built upon the regular personal pronouns rather than upon the emphatic pronoun of 1.6.1. Except for the emphatic pronouns which occur only in the singular number, the remaining forms are simply the regular personal pronouns in the axis of the Sub-Ar. with the enclitic -ŋe and are made emphatic by the suffix -âk '*only*'. The resultant forms are given in Matrix 10.

Matrix 10: Emphatic pronoun--3

	Sg.	Du.	Pl.
1st per.	(nâ) ninak/nâŋak	netŋak	nennak
2nd per.	(gâ) gikak/gâŋak	yetŋak	yenak
3rd per.	(yâk) ikŋak/yâkŋak	yâk(yet)ŋak	yâk(ye)ŋak

- (a) nâ ninak sogo kum takan
I myself animal killing I came
'I myself killed the animal and came.'
- (b) german austrelia yâkŋak takai
Germans Australians they-alone they came
'Only the Germans and Australians came.'

2. INDEFINITE PRONOUNS

There are only two pronouns in this class and the plural number is formed by reduplication.

âlâ 'a, an, another'; âlââ 'others, some, a few'

odop 'a, an, another'; odowodop 'others, some, a few'

These pronouns are semantically distinct in that ala generally refers to another of the same sort but odop refers to another of a different sort. Furthermore, âlâ occurs with the contrastive suffix {-ku}:

lok âlâhu takap 'A different man came.'

- (a) yâk muop. yakât ibi âlâ mebom
she she died therefore woman another I will get
'She died. Therefore I will get another wife (no indication that she will be different).'

- (b) âlâ mem nihi
another holding give me
'Give me another (like the first).'

- (c) lok ya hâkân oan. lok odop mebom
man that dislike I do man another I will get
'I do not like that man. I will get another husband (who is different).'

These pronouns occur in the third order post-Head tagmeme (Indefinite, Id.) of the General Noun Phrase.

- (a) wahap bâleŋe âlâ (H: thing, A: bad, Id: a) 'a bad thing'
 (b) konok âlâ (N: one, Id: another) 'another one'

When âlâ occurs alone (i.e. as the only item of the General Noun

Phrase) in the axes of the Sub-Ar., the B/C-Ar. or the Poss-Ar., it has the meaning 'who?' and refers only to human referents.¹⁴

(1) Subject Axis-relator phrase

imɨŋe âlâ-ŋe sâop
his younger brother another-sub. he said
'Another younger brother of his spoke.'

âlâ-ŋe mem yingiap
who-sub. holding he gave it to them
'Who gave it to them?'

(2) Benefaction/Cause Axis-relator phrase

hân âlâ-gât mene sâm
ground another-for wanting to hold
'wanting to take over another country!...'

âlâ-gât sâwi
whom-for they spoke
'For whom did they speak?'

(3) Possession Axis-relator phrase

mesik âlâ-gât soki soki
sickness another-poss. germs
'germs which cause another sickness'

âlâ-gât hânângen
who-poss. to the ground
'to whose country'

The pronoun âlâ also occurs in the following tagmemes.

(4) Object tagmeme

âlâ yat 'What did you say?'

(5) Instrument Axis-relator phrase with the relator word kâdâk.

bia bâgup âlâ kâdâk kuop
no club another with he hit it
'No, he hit it with another club.'

(6) Location Axis-relator phrase

âlâ-engen sot bia-engen ariop
another-to food no-to it went
'It went to another place, to a place with no food.'

3. DEMONSTRATIVE PRONOUNS

These pronouns may be divided into two subclasses on the basis of

their distribution: the regular demonstrative pronouns and the interrogative demonstrative pronouns.

3.1. REGULAR DEMONSTRATIVE PRONOUNS

The regular demonstrative pronouns have the structure: + nucleus + position. The nucleus is manifested by the demonstrative forms and the position is manifested by relative position markers. The demonstrative forms are: y- '*this, that*', ed- '*that over there*', eb- '*that down below*' and ew- '*that up above*'. The position markers are: -u '*near*' and -a '*distant*'.

yu '*this*' (near the speaker)

ya '*that*' (near the hearer)

edu '*that over there*' (removed from both speaker and hearer but near by)

eda '*that over there*' (distantly removed from both speaker and hearer)

ewu '*that up there*' (near)

ewa '*that up there*' (distant)

ebu '*that down there*' (near)

eba '*that down there*' (distant)

These pronouns occur in a fourth order post-Head tagmeme (Demonstrative, D.) of the General Noun Phrase and thus frequently qualify the indefinite pronouns.

(a) kât pato ya (H: *stone*, A: *big*, D: *that*) '*that big stone*'

(b) âlâ ya (Id: *another*, D: *that*) '*that other one*'

3.2. INTERROGATIVE DEMONSTRATIVE PRONOUNS

There are only two interrogative demonstrative pronouns: wosa '*which one*' and wuân '*what*'. wosa includes both animate and inanimate referents; wuân includes inanimate referents as well as actions. wosa occurs in the same tagmeme as the regular demonstrative pronouns. wuân substitutes for the core of the General Noun Phrase.

(a) kaok wosa-ŋe kupekmâ (A: *white*, D: *which-sub.*, iP: *plucking*) '*which white (man) plucked it...*'

(b) wuân âlâ ekyongoai (core: *what*, Id: *another*, iP: *they told him*) '*What else did they tell him?*'

(c) wuân gogone (core: *what*, A: *crooked*) '*what crooked thing...*'

3.3. DISTRIBUTION

The various demonstrative pronouns have slightly different patterns of distribution in clause level and phrase level tagmemes. Note that

the demonstratives ewu, edu and ebu occur only in the axes of the Loc-Ar.

(1) Subject Axis-relator phrase

- (a) bau ya-ŋe hobot kukum pilâm gaop
pig that-sub. cane riding on casting it came
'That pig came crashing through the cane.'
- (b) wuân-ŋe ari edaken ɲerek tâtuk tâtuk yap
what-sub. go over there all it became rotten
'What has all gone over there and became rotten?'
- (c) lok wosa-ŋe gasam gowene kupekmâ golem ari
man which-sub. cassowary its leg plucking carrying go
'Which man plucked out the cassowary's leg and carried it away?'

(2) Object tagmeme. All of the demonstratives except ewu, edu and ebu occur as objects.

- (a) ya otnom (*that, we will do*) *'We will do that.'*
- (b) wuân nemat (*what, you eat*) *'What do you usually eat?'*
- (c) wosa sâmunŋe (*which, we say*) *'Which (statement) shall we make?'*

(3) Location Axis-relator phrase. All of the demonstratives occur in the axis of the Loc-Ar. The form wuân manifests vowel contraction to the form won.

- (a) ya-ân (*that-at*) *'there'*
- (b) won-ân (*what-at*) *'where?'*
- (c) wosa-ân (*which-at*) *'where?'*

(4) Benefaction/Cause Axis-relator phrase. All of the demonstratives except wosa, ebu, edu and ewu occur in the axis of this phrase.

- (a) ya-kât sâm katbi
that-for speaking they put it
'Speaking about that they put it.'
- (b) wuân-gât giai
what-for they came down
'Why did they come down?'

(5) Possession Axis-relator phrase. The forms wosa, ebu, edu and ewu do not occur in the axis of this phrase.

- (a) âlâ-hât emet yu
who-poss. house this
'Whose house is this?'
- (b) muop ya-kât sumân ari
he died that-poss. to the grave go
'Going to the grave of him who died...'

(6) Manner Axis-relator phrase. Only the regular demonstrative pronouns (excepting ebu, edu and ewu) occur in the axis of this phrase. The relator is -wu 'like'.

- (a) yawu *'in that manner, thus, like that (one)'*
- (b) yuwu *'in this manner, thus, like this (one)'*
- (c) ewawu *'like that (one) up there'*
- (d) edawu *'like that (one) over there'*
- (e) ebawu *'like that (one) down there'*
- (f) awu omoŋ kâmetmâ yawu tuhuop
k. of here planting thus he did
'He planted the herb in that manner.'

(7) Instrument Axis-relator phrase. There are two relators: the enclitic -ŋe and the word kâdâk.

- (a) pet ya-ŋe latbagiŋetâ
loin cloth that-with they girded him
'They girded him with a loin cloth...'
- (b) wuân-ŋe mem yahatnom
what-with holding we will get up
'With what shall we begin it (business)?'

(8) Accompaniment Axis-relator phrase. Only the regular demonstrative pronouns have been observed occurring in the axis of this phrase.

ibiŋe ya orop madomawot
his wife that with they (du.) will live
'He will live with that wife of his.'

When the regular demonstrative pronouns occur in the subject tagmeme, object tagmeme, or the axis of the Sub-Ar. they may also occur with the suffix -âk 'only' yielding emphatic forms (see 1.5. and 1.6. concerning the regular personal pronoun in the same constructions) or the suffix -âmâ 'however' yielding comparative forms (see 1.3.).

- (a) han yu-ŋe-âk puririk sâwuap
ground this-sub.-only it will rotate
'this earth will rotate'
- (b) den konok yu-âk alahum
talk one this-only speaking
'speaking only this one language'
- (c) be ya-ok hidâm
taro that-only pulling out
'pulling out only that taro'

- (d) hân ya-âmâ ɲerek mem pesuk pilâwi
ground that-however all holding they did it completely
'they took all of that ground, however,...'
- (e) yu-âmâ biatmu
this-however it disappeared
'this, however, disappeared'
- (f) ya-ɲe-âmâ bau watɲetâ
those- -however pig they chased it
'those, however, chased the pig'

4. DERIVED DEMONSTRATIVE PRONOUNS

There are a number of pronouns which have the structure: + nucleus + -wu 'like' + -ya. The nucleus manifests the regular demonstrative pronouns eba, eda, ewa, ya and yu or the adverb gira 'how'.

- ebawuya *'one like that (one) down there'*
 edawuya *'one like that (one) over there'*
 ewawuya *'one like that (one) up there'*
 yawuya *'one like that (one) near you'*
 yuwuya *'one like this (one) near me'*
 girawuya *'which kind of one?'*

These pronouns have the following distribution:

(1) Subject tagmeme

- yuwuya kinmâ nitkiap
one like this standing he gave us
'One like this one stood and gave it to us(du.).'

(2) Subject Axis-relator phrase

- girawuya-ɲe kasai
what kind of one-sub. they put it
'What kind of people put it.'

(3) Object tagmeme

- yuwuya mem tohorâ
one like this holding you come
'when you bring one like this'

(4) Benefaction/Cause Axis-relator phrase

- girawuya-kât nagat
what kind of thing-for you thought
'About which kind of thing did you think?'

(5) Possession Axis-relator phrase

girawuya-kât topŋe ki nagan
what kind of thing-poss. its meaning not I know
'Which kind of thing do I not know the meaning of?'

5. NOMINAL POSSESSION-MARKING SUFFIXES

These suffixes occur in the final suffixial order of possessed nouns (see McElhanon, 1970b). They are similar in phonemic shape to the regular personal pronouns. The suffixes and their formatives are given in Matrix 11.

Matrix 11: Possession-marking suffixes

	Sg. (ø)	Du. (t)	Pl. (n/ø)
1st per. (n)	n-e-ø-ø	n-e-t-ŋe	n-e-n-ŋe
2nd per. (g/y)	g-e-ø-ø	y-e-t-ŋe	y-e-ø-ŋe
3rd per. (ø/y)	ø-ø-ø-ŋe	y-e-t-ŋe	y-e-ø-ŋe

The function and meaning of the form -ŋe is not evident but it may be tentatively regarded as an identificational (class?) marker even as the vowels may be given such status in the pronominal object-marking verbal affixes (see section 6).

The formative ø indicating 'third person' with the singular number is also found in the singular forms of the subclass II pronominal object-marking affixes occurring with the verb '*to bite*': n-ihi '*me*', g-ihi '*you*' and ø-ihi '*him, her, it*'.

The possession-marking suffixes may be permuted to the prenuclear position in the noun structure with the result indicating emphasis. Only dual and plural possession-marking suffixes have been observed exhibiting such permutation and the fact that singular forms do not so occur may indicate that the regular personal pronoun occurring in the possession tagmeme (see 1.1.(4)) serves this function.

(a) denenŋe (den-nenŋe *language-our*) '*our language*'

(b) nenŋeren (nenŋe-den *our-language*) '*OUR language*'

In narratives the noun root on which the possession-marking suffixes occur may be deleted if confusion is unlikely to result. Such deletion occurs only when the possessed noun occurs in the axis of an axis-relator phrase (usually a Loc-Ar.). The remaining possession-marking suffix and relator enclitic assume the phonological characteristics of a single word.

(a) In this example *nenge-ân* occurs rather than *nengâân* (see 1.1.(5)).

yakenâmâ bau hulin sesegât. nenge-ân yuân biatmu
over there, however pig wild many our-at here they disappeared
'Over there, however, are many wild pigs. Here at our (place) they disappeared...'

(b) In this example *yene-hât* occurs rather than *yegât* (see 1.1.(4)).

yene-hât nam nem im âdenetâ
their-poss. milk eating sleeping they continued
'they slept on drinking their (mother's) milk...'

6. PRONOMINAL OBJECT-MARKING VERBAL SUFFIXES

With the exception of a single verb root, *-n* 'to call someone, to name someone', all Selepet transitive verb roots occur with pronominal object-marking suffixes. The subclass III object-marking affixes which occur with the verb root *-n*, however, are clearly prefixal:¹⁵ *noho-n-sap* (*me-call-he(ipt.)*) 'He called me'; *goho-n-sap* (*you-call-he(ipt.)*) 'He called you'.

There are three allomorph subclasses of the object-marking suffixes and transitive verbs are divided into three subclasses on the basis of their occurrence with one of the allomorph subclasses. The structure of the transitive verb stem is an obligatory nucleus manifested by a root plus an obligatory object slot manifested by the object-marking suffixes. In subclass III verbs the object markers also function as verbalisers.

It should be noted that each class of verbs contains a verb root morpheme represented by zero and that these roots are distinguished by the allomorphs of the object-marking suffixes. Thus the zero morphemes mean 'to see' with subclass I object-marking allomorphs, 'to give' or 'to bite' with subclass II allomorphs and 'to hit' or 'to kill' with subclass III allomorphs.

The object-markers may be tentatively analysed as composites having the structure: person + number + class marker. The class marker may be analysed as a velar stop phoneme plus a prosody of vowel quality. In subclass I the class marker is *k* plus vowel quality *e*, in subclass II it is *g* plus vowel quality *i* and in subclass III it is *k/g* plus vowel quality *o/u*.

6.1. The morphemes and formatives for subclass I object markers are given in Matrix 12.

Matrix 12: Subclass I object markers

	Sg. (\emptyset)	Du. (l)	Pl. (n/ \emptyset)
1st per. (n)	n-e- \emptyset -ek	n-e-l-ek	n-e-n-ek
2nd per. (g/y)	g-e- \emptyset -ek	y-e-l-ek	y-e- \emptyset -ek
3rd per. (\emptyset /y)	\emptyset -e- \emptyset -ek	y-e-l-ek	y-e- \emptyset -ek

reflexive/reciprocal marker is -ak

The 3s object marker ek occurs only with the zero morpheme verb root with the meaning 'to see' and has an allomorph - \emptyset occurring with all other verb roots. In the class marker indicating 'subclass I', the velar stop metathesised with the following vowel and then became voiceless in the word final position: thus ek rather than ge.

pilâ-nek-sap	'He dismissed me'	pilâ- \emptyset -ap	'He threw it away'
piri-nek-sap	'He washed me'	piri- \emptyset -ap	'He washed him'
\emptyset -nek-sap	'He saw me'	\emptyset -ek-sap	'He saw him'
gâi-nek-sap	'He cut me'	gâi- \emptyset -ap	'He cut it'
gâi-ak-sap	'He cut himself'	yerâ-ak-sai	'They shot one another'

When the reflexive/reciprocal form -ak occurs with the verb meaning 'to see' the 3s pronominal marker occurs as the verb root: ek-ak-sap 'He saw himself', ek-ak-sawot 'They (du.) saw each other'.

The morpheme -ak also occurs with the meaning 'for oneself' and regularly functions as a benefactive reflexive pronominal marker when the subject is in the singular number.

pulu-hu-ak-buap	'He will buy it for himself.'
kat-ak-sap	'He put it away for himself.'

6.2. The morphemes and formatives for subclass II object markers are given in Matrix 13.

Matrix 13: Subclass II object markers

	Sg. (\emptyset)	Du. (t)	Pl. (n)
1st per. (n)	n-i- \emptyset -gi	n-i-t-gi	n-i-n-gi
2nd per. (g/y)	g-i- \emptyset -gi	y-i-t-gi	y-i-n-gi
3rd per. (\emptyset)	\emptyset -i- \emptyset -gi	y-i-t-gi	y-i-n-gi

reflexive/reciprocal marker is -agi

The 3s object marker ihi occurs only with the zero morpheme meaning

'to bite'. An allomorph *waŋ* occurs only with the zero morpheme meaning 'to give'. All other verb roots occur with a zero morpheme indicating 3s object marker. The subclass II object markers are obviously related to the benefactive pronominal markers and often it is difficult to decide whether a particular verb root occurs with subclass II object markers or whether it occurs with subclass I object marker 3s, \emptyset , followed by the benefactive pronominal markers.

The benefactive pronominal markers occur as a first order verbal suffix and all forms are identical with the subclass II object markers except 3s which has the form *-wagi*.¹⁶ That the benefactive markers are distinct from the subclass II object markers is evident in the following example: \emptyset -ihi-nihi-ap (*bite-it-for me-it(ipt.)*) 'It chewed up it (my rooster) for me'.

(a) Subclass II object markers

mabot-nihi-ap 'He awaited me.' mabot- \emptyset -sap 'He awaited him.'
mewale-nihi-ap 'He cheated me.' mewale- \emptyset -ap 'He cheated him.'

(b) Benefactive markers

\emptyset -ku-nihi-ap (*hit-it-for me-he(ipt.)*) 'He killed it for me.'
kat- \emptyset -yingi-ap (*put-it-for them-he(ipt.)*) 'He put it away for them.'

6.3. The morphemes and formatives for subclass III object markers are given in Matrix 14.

Matrix 14: Subclass III object markers

	Sg. (\emptyset)	Du. (t)	Pl. (n)
1st per. (n)	n-o- \emptyset -go	n-o-t-go	n-o-n-go
2nd per. (g/y)	g-o- \emptyset -go	y-o-t-go	y-o-n-go
3rd per. (\emptyset)	\emptyset - \emptyset -ku	y-o-t-go	y-o-n-go

reflexive/reciprocal marker is -aho

When the zero morpheme verb root meaning 'to hit, kill' occurs the 3s allomorph is -ku. The other allomorphs, -gu or -hu, occur with all the other verb roots.

When the subclass I reflexive/reciprocal form -ak occurs with the verbs meaning 'to hit' or 'to call someone, call someone's name', the verb roots are aho- and ahon- respectively: aho-ak-sap 'He hit himself', ahon-ak-sap 'He said his own name'.¹⁷

The verbalising force of the pronominal object markers is most evident in subclass III. Transitive verb stems are derived from the following classes of roots.

(a) Noun roots:

- lâm-gu 'to watch him' from lẫm 'hole'
 kâlâp-gu 'to arouse him' from kâlâp 'fire'
 tẫn-gu 'to help him' from tẫn 'bone'
 kulẽm-gu 'to draw it' from kulẽm 'mark'
 hewum-gu 'to bundle it' from hewum 'bundle'

(b) Adjective roots:

- helen̄-gu 'to blacken something' from helen̄ 'black'
 kurinḡ-gu 'to ripen it' from kurinḡ 'red'

(c) Adjunct roots

Only adjuncts occurring with the auxiliary ot 'to do' have been observed as derived transitive verb stems.

- gulip-gu 'to erase something' from gulip ot 'to disappear'
 hen̄-aho 'to play together' from hen̄ ot 'to play'

(d) Transitive verb roots

The following roots have been observed only in the core of transitive verb stems:

- | | |
|---------------------------|------------------------|
| ulit-gu 'to beg him' | âik-ku 'to ask him' |
| hegem-gu 'to decorate it' | ek-ku 'to tell him' |
| hawam-gu 'to encircle it' | walip-ku 'to touch it' |

NOTES

1. The data upon which this paper is based were collected by the writer during extended field trips from 1964-9 while under the auspices of the Summer Institute of Linguistics and the Australian National University. The Selepet language is spoken by 5500 Selepet people and perhaps by as many as 2500 bilingual Komba people living in the Selepet Census Division, Morobe District, Territory of New Guinea. The language belongs to the Western Family of the Huon Peninsula Stock of languages (see McElhanon, 1967, 1970c). The writer is indebted to C.L. Voorhoeve for suggestions in the presentation of this paper.

Analysis of the data was facilitated by use of a concordance of 25,000 words of text in the southern Selepet dialect made on the IBM 1410 computer at the University of Oklahoma by the Linguistic Information Retrieval Project of the Summer Institute of Linguistics and the University of Oklahoma Research Institute, and sponsored by Grant GS-934 of the National Science Foundation.

The following abbreviations are used: Attributive tagmeme (A.), Accompaniment Axis-relator Phrase (Acc-Ar.), Benefaction/Cause Axis-relator Phrase (B/C-Ar.), Demonstrative tagmeme (D.), Head tagmeme (H.), immediate past tense (ipt.), Indefinite tagmeme (Id.), inclusive suffix (incl.), Instrument Axis-relator Phrase (Inst-Ar.), Location Axis-relator Phrase (Loc-Ar.), Number tagmeme (N.), Object tagmeme (O.), Predicate tagmeme (P.), Possession Axis-relator Phrase (Poss-Ar.), remote past tense (rpt.), Subject Axis-relator tagmeme (Sub-Ar.), and subject relator enclitic (sub.).

2. See in particular, Pike (1963), Pike and Erickson (1964).

3. The matrix technique was applied to Selepet verb morphology in McElhanon (1969a).

4. This instance of axis-relator phrase embedding is mentioned here because it is the only type of construction which involves regular

personal pronouns occurring in the location tagmeme. Other instances of phrase embedding are treated in McElhanon (1970a).

5. To obtain the correct phonological realisations of the morphemes in the matrices and the morphemes marked by hyphens in the examples morpho-phonemic rules must be applied (see McElhanon, 1970d:23-26). Braces { } enclosing a morpheme indicate that the morpheme has allomorphic variants which are generally listed only with the first identification of the morpheme in this paper. In the matrices the form enclosed in parentheses is optional.

6. In early treatments of the noun morphologies of other languages of the Huon Peninsula Stock, Pilhofer (1926-7, 1927-8, 1933) and Wacke (1930-1) used the case system approach. Pilhofer (1926-7, 1933), in describing Kâte noun morphology, listed ten cases: *indiff.* (intransitive subject and transitive object), *nominativ agentis* (transitive subject), *destinativ* (benefaction/cause, possession), *adlativ* (location), *delativ* (direction from), *adversiv* (direction towards), *deversiv* (direction away from), *komitativ* (association), *karitiv* (lack of possession) and *instrumentalis* (instrument). These case markers are phrase level enclitics and occur as relators in axis-relator phrases in which the axis may be manifested by a variety of constructions from various levels of the grammatical hierarchy.

7. The formative indicating plural number has two allo-formatives in this matrix: *n* as in *ne-n-ŋe* and *ø* as in *ye-ø-ŋe*. For *ø* indicating plural number in the verbal subject-marking suffixes see McElhanon (1969a:10).

8. There are two classes of Selepet nouns: those which occur obligatorily with possession-marking suffixes and those which do not. Both classes of nouns may occur qualified by the Possession Axis-relator phrase so that possession may be shown only by the phrase or the nominal suffixes or redundantly by both.

9. The *n* in *yen* assimilates to the point of articulation of the *g* in *-gât* 'for' and then reduces before the pre-nasalisation of the *g* yielding *yegât* rather than *yengât*.

10. The one exception is that the regular personal pronouns do occur in the Loc-Ar. when it occurs in the Head of the Original Noun Phrase: *nâ-en gâtŋe* (*mê-at*, *one from*) 'a member of my family'.

11. The allomorph -hu occurs only on the indefinite pronoun âlâ.
12. The enclitic -âmâ appears to be completely unrestricted in its occurrence and has been observed suffixed to all word classes and construction types.
13. The form ikñiâk is homophonous with a derived adverb meaning 'by itself, alone'.
14. In narrative structure, however, the noun is frequently omitted from the General Noun Phrase when there is no confusion over the item under discussion. This omission frequently leaves âlâ as the only remaining item.
- (a) bukuŋa-ŋe âlâ tetmu
his friend-sub. another he excreted
'and his friend excreted another (stool)'
- (b) hân âlâ-gât mene sâm, âlâ-gât âlâ-gât mene sâm
ground another-for wanting to hold another-for another-for wanting to hold
'wanting to take over another country, wanting to take over another and another...'
15. An alternative solution would be to posit a discontinuous morpheme ø...n.
16. An historical explanation of the similarity between the benefactive pronominal markers and the subclass II object markers as well as the development of the disparate forms waŋ, wagi and ihi for 3s is expected after diachronic studies are completed. The forms wagi and ihi may follow regular sound shifts. Note that the verb root 'to beg' has two forms ulit- and welet-. The vowels u and i, moreover, often fluctuate. Thus as u is a correspondence of we so also i may be posited as a correspondence of wa. The form waŋ then may reflect a simple loss of the class marker gi.
17. It is apparent that the verb roots are related to the reflexive/reciprocal marker -aho and may be derived from that form. Whether one should regard the forms aho- and ahon- as allomorphs of ø- and -n respectively or whether one should posit special derived verbal forms may become evident after diachronic studies are completed.

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